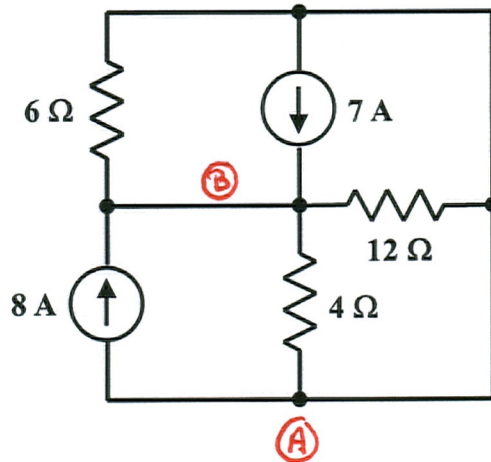
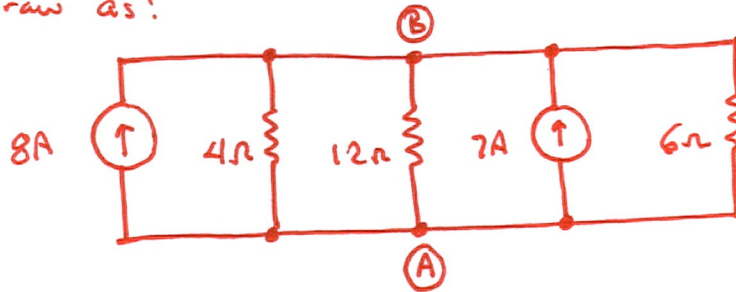


EE/EET 2240
Homework Problem #024

Use any method to determine the amount of power absorbed by each resistor.



Redraw as:



$$8A \parallel 7A = 15A$$

$$4\Omega \parallel 12\Omega \parallel 6\Omega = 2\Omega$$

$$\therefore V_{BA} = (15A)(2\Omega) = 30V$$

$$P_{4\Omega} = \frac{V_{BA}^2}{4\Omega} = 225W$$

$$P_{12\Omega} = \frac{V_{BA}^2}{12\Omega} = 75W$$

$$P_{6\Omega} = \frac{V_{BA}^2}{6\Omega} = 150W$$